8 Um:

Each

: BRACKET ASSEMBLY

: D3121141

: N/A

: N/A

: 3/30/2007

; D

: D3121 REV D

Date:

Wednesday, 3/7/2007 3:52:50 PM

User

Kim Johnston

Process Sheet

Drawing Name

Part Number

Material

Due Date

Drawing Number

Project Number

Drawing Revision

Customer

: CU-DAR001 Dart Helicopters Services

Job Number : 31069

Estimate Number

: 10278

P.O. Number

Prsht Rev.

First Issue

Written By

Previous Run

: NIA

This Issue

: 3/7/2007

S.O. No. : NA

: MA : 30700

Type

: MACHINED PARTS

Comment

: Est Rev:Pick:A 04.02.18

New issue KJ/DS

Additional Product

Checked & Approved By

Job Number:



Seq. #:

Machine Or Operation:

Description:

1.0

17-4 SS Bar

0.5775 f(s)/Unit Total:

Material: 17-4 SS Bar per AMS 5604/5643

(M17-4-B1.000x02.000) Identify for D3121-111 Batch: <u>MI03087</u>

2.0

BAND SAW

4.6200 f(s)



Comment: BAND SAW

Comment: Qty.:

Cut blanks: (1.000" x 2.000") 6.600" long

HAAS CNC VERTICAL MACHINING #1

3.0



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3121-111 as per Folio FA361 and Dwg D3121Identify as D3121-111

2-Deburr

3-Scribe batch number

INSPECT PARTS AS THEY COME OFF MACHINI

4.0

QC2

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

Page 1

Dart Aerospace Ltd

W/O:		WORK ORDER C	HANGES				
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No);	PAR #: Fault Category:	NCR: Ye	s (No) DQ	A: <u></u>	Date: _	07/05/03

QA: N/C Closed: ____ Date: ___

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC		Corrective Action Section B	· · · · ·	Verification	£:4:	Approval QC Inspector	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng		
					·				
							:		
	3			·					

NOTE: Date & initial all entries

Wednesday, 3/7/2007 3:52:50 PM Date: User: Kim Johnston **Process Sheet** Drawing Name: BRACKET ASSEMBLY Customer: CU-DAR001 Dart Helicopters Services Part Number: D3121141 Job Number: 31069 Job Number: Description: Seq. #; **Machine Or Operation:** SECOND CHECK 5.0 QC8 Comment: SECOND CHECK D312121 Bolt Comment: Qty.: 1.0000 Each(s)/Unit Total: 8.0000 Each(s) Pick: Description Batch Qty Part Number 1 D3121-21 Bolt 1331758 ml 07/04/31 7.0 D3121241 Bearing Assembly 1.0000 Each(s)/Unit 8.0000 Each(s) Comment: Qty.: Total: Pick: Description Batch Qtv Part Number 207/04/30 1 D3121-241 Bearing Ass R31700 8.0 SMALL FAB Comment: SMALL & MEDIUM FAB RESOURCE 1 Assemble D3121-141 as per Dwg D3121. INSPECT WORK TO CURRENT STEE 9.0 QC5 Comment: INSPECT WORK TO CURRENT STEP PACKAGING RESOURCE #1 PACKAGING 1 10.0 Comment: PACKAGING RESOURCE #1 Identify and Stock FINAL INSPECTION/W/O RELEASE 11.0 QC21 Comment: FINAL INSPECTION/W/O RELEASE M 07.8.03 Job Completion

Dart Aerospace Ltd

W/O:		WORK ORDER CI	WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
Part No	•	PAR #: Fault Category:	NCR: Yes	No DQ	A:	_ Date: _		
			QA:	N/C Close	d:	_ Date: _		

NCR:	WORK ORDER NON-CONFORMANCE (NC							
		Description of NC		Corrective Action Section B			Annewal	Ammanal
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	- Verification Section C	Approval Chief Eng	Approval QC Inspector
			·					
· · · · · · · · · · · · · · · · · · ·		·						

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	31069
Description: Bracket	Part Number:	D3121-111
Inspection Dwg: D3121 Rev: D		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing	7-1	Actual	Accept	Reject	Method of	Comments
Dimension	Tolerance	Dimension	Accept	Reject	Inspection	Comments
Ø0.392	+0.002/-0.000	.393	1			
0.75	+/-0.030	.750				
0.375	+/-0.010	.375				
2.14	+/-0.030	2.145				
.0.950	+/-0.010	. 949				
0.600	+/-0:010	.600				
1.96	+/-0.030	1.961	/			
0.280	+/-0.010	,ଅ&ଚ	/			
3.330	+/-0.010	3.330				
3.630	+/-0.010	3.629				
R0.25	+/-0.030	1.250				- 10 20
R0.375	+/-0.010	1.375	/			
Ø0.201	+0.005/-0.000	. 202				
0.100	+/-0.010	-101				
6.18	+/-0.030	1 196				
5.89	+/-0.030	6-186				
0.080	+/-0.030	5.897			· .	
0.300	+/-0.010	-081				
30°	+/-0.010 +/-0.1°	. 298				
R0.25	+/-0.1	300				
	+/-0.030	1,250	/			J. 144 94800
0.130	+/-0.010	./3/				
0.381	+/-0.010	.384	/,			
.201 -0.281-	+/-0.010	. હ્રવક	1			
0.400	+/-0.010	. 401	/			
0.580	+/-0.010	.588				•
100°	+/-0.1°	/00°				
-032 · 0.32	+/-0.010	160-				

Measured by: J Audited by: MS Prototype Approval: N/A

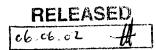
Date: 07/03/09 Date: N/A

Rev	⊕Date	Change	Revised by	Approved
Α	04.01.12	New Issue P/O D3121-141	KJ/RF	4
В	04.05.05	Dimensions changed/re-arranged per Dwg revision	KJ/JLM 1.A	21
С	06.06.14	Dwg Rev. updated	KJ/JLM	
				/ /

and the



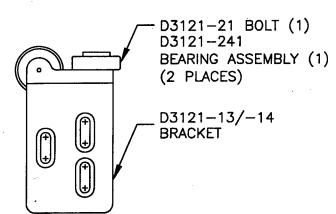
DESIG	4	C \mathcal{B}	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHEC	(ED)	APPROVED A	DRAWING NO. REV. D
	Ms.k	#	D3121 SHEET 1 OF 10
DATE			TITLE SCALE
06.0	5.17		BRACKET ASSEMBLY 1:2
Α		02.04.15	NEW ISSUE
В		03.01.16	ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146
С		04.02.17	ADD CLEARANCE; USE -241 BEARING
D		06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000



 D3121-21 BOLT (1) D3121-241 BEARING ASSEMBLY (1)
 D3121-11 BRACKET

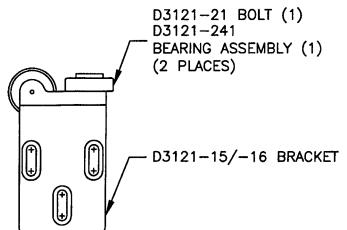
D3121-041 BRACKET ASSEMBLY

(REPLACES PREMIER P/N B30-23000-33)



D3121-043 (SHOWN) / D3121-044 (OPPOSITE) BRACKET ASSEMBLY

(REPLACES PREMIER P/N B30-23000-37/-38)



D3121-045 (SHOWN) / D3121-046 (OPPOSITE) BRACKET ASSEMBLY

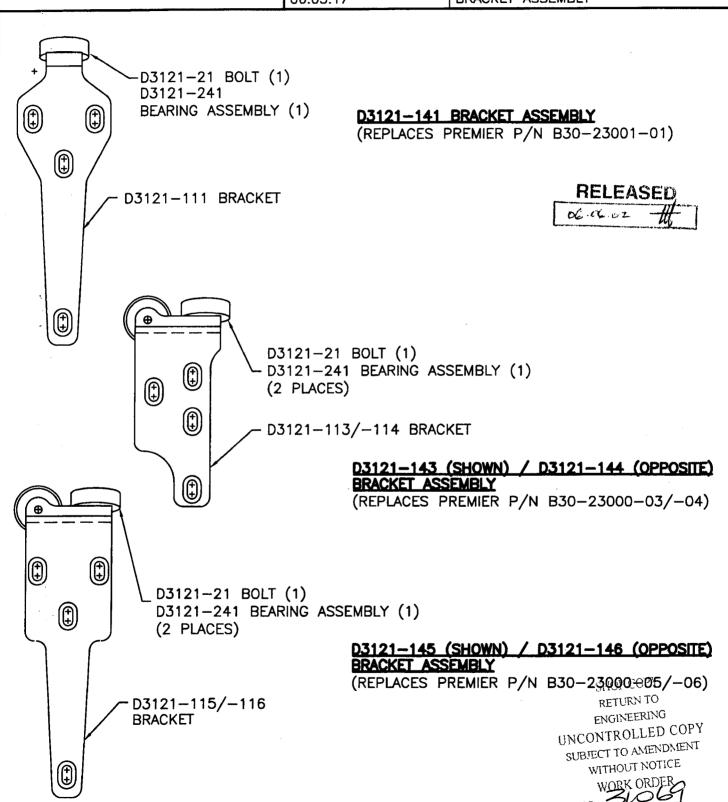
(REPLACES PREMIER P/N B30-23000-35/-36)

SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE

WORK ORDER NO.31069

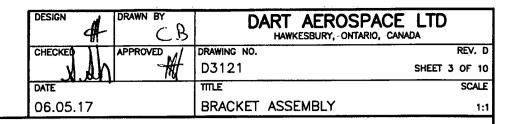


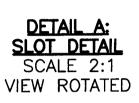
DESIGN	DRAWN BY	DART AEROS HAWKESBURY, ON	
CHECKED	APPROVED	DRAWING NO.	REV. D SHEET 2 OF 10
DATE		TITLE	SCALE SCALE
06.05.17		BRACKET ASSEMBLY	1:2

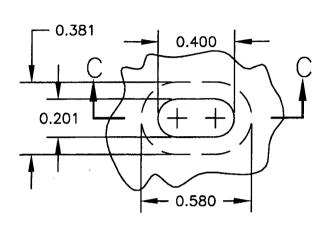


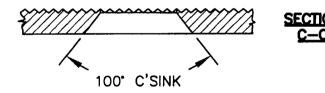
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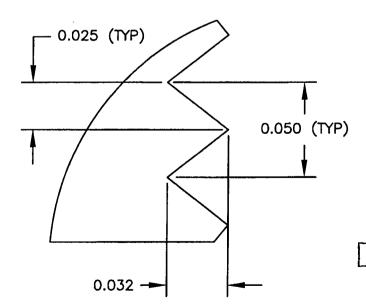








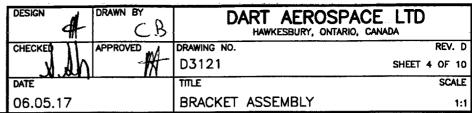
DETAIL B: RIDGE DETAIL PARTIAL SECTION **SCALE 1:20**

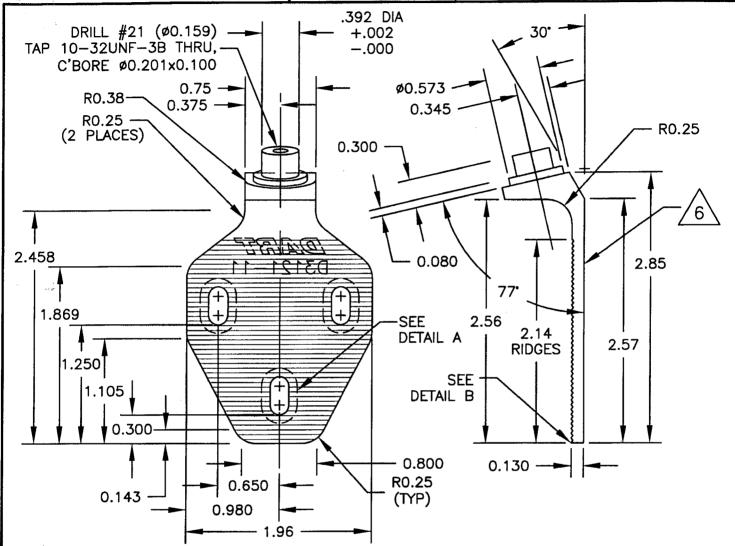


SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE WORK ORDER NO. 310

RELEASED do do 02 #







SHOP COPY RETURN TO **ENGINEERING** UNCONTROLLED COPY SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

D3121-11 BRACKET

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) MIN ULTIMATE TENSILE = 150 ksi

MIN YIELD TENSILE = 100 ksi

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES

4) BREAK ALL SHARP EDGES 0.005 TO 0.015

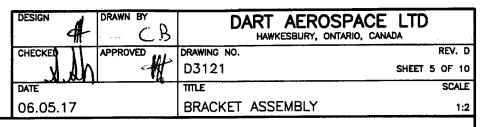
5) ENGRAVE DART P/N & LOGO AS SHOWN

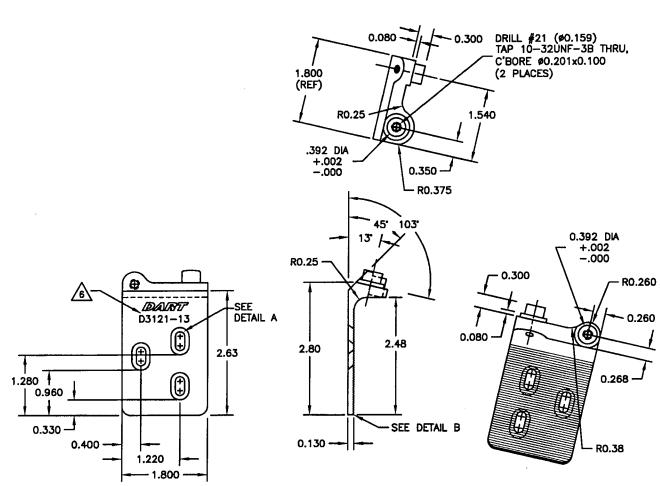
6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

RELEASED 06 de 02.

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D3121-13 BRACKET (SHOWN) D3121-14 BRACKET (OPPOSITE)

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) UNCONTROLLED COPY MIN ULTIMATE TENSILE STRENGTH = 150 ksi

MIN YIELD TENSILE STRENGTH = 100 ksi

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES

4) BREAK ALL SHARP EDGES 0.005 TO 0.015

5) ENGRAVE DART P/N & LOGO AS SHOWN

6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

SHOP COPY RETURN TO ENGINEERING

SUBJECT TO AMENDMENT WITHOUT NOTICE

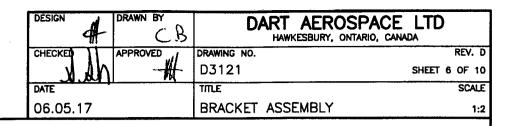
WORK ORDER NO. 510

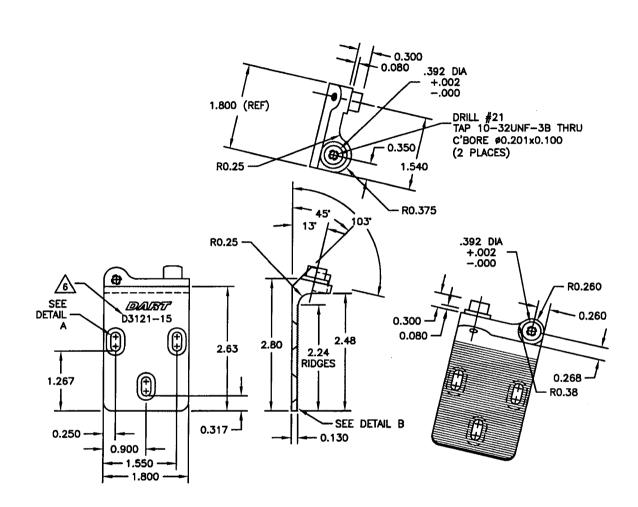
RELEASED

06.06.02

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D3121-15 BRACKET (SHOWN) D3121-16 BRACKET (OPPOSITE)

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

SHOP COPY RETURN TO ENGINEERING

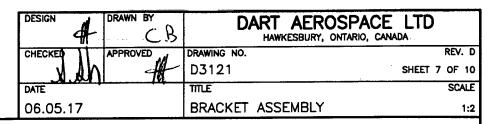
UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE

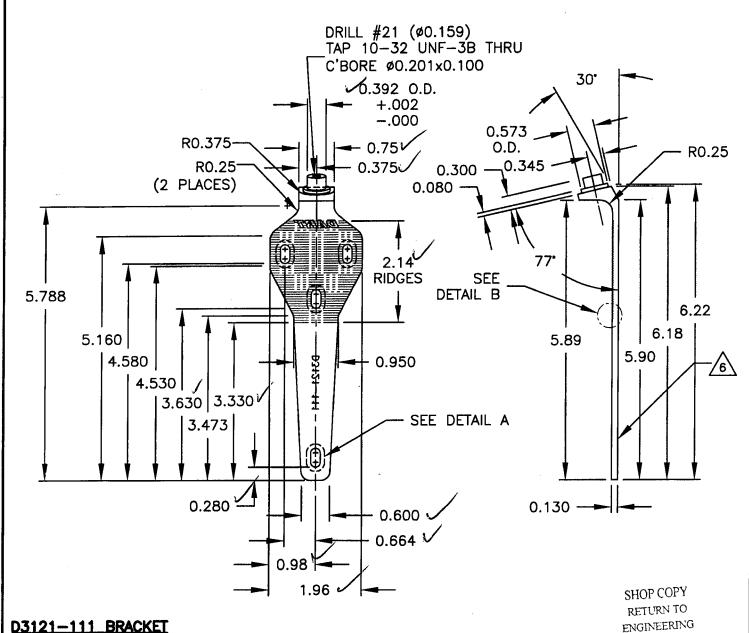
WORK ORDER

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D3121-111 BRACKET

1) REPLACES PREMIER P/N B32-23001-11

2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) MIN ULTIMATE TENSILE = 150 ksi

MIN YIELD TENSILE = 100 ksi

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHEWISE NOTED

- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

RELEASED

UNCONTROLLED COPY

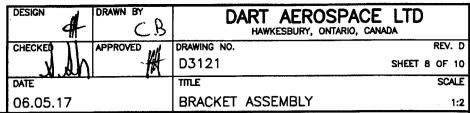
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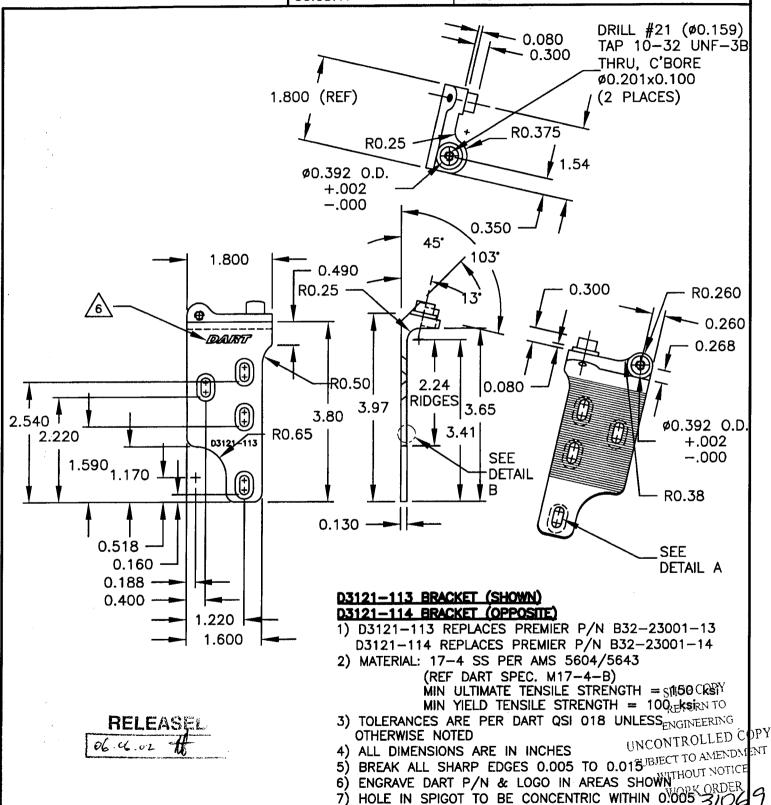
WITHOUT NOTICE

WORK ORDER

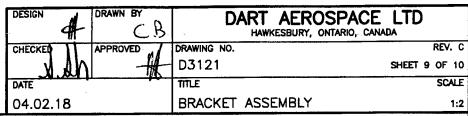
06.06.62

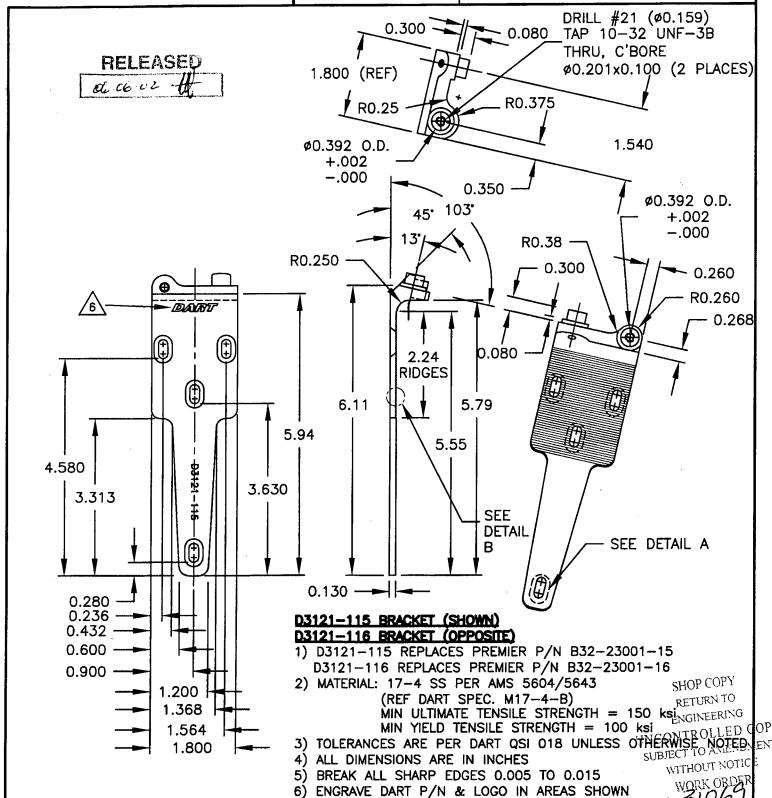








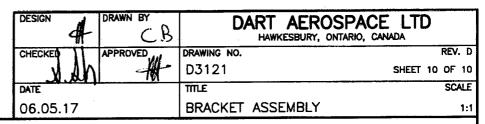


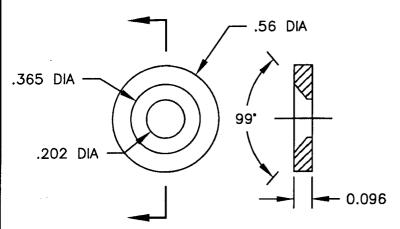


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HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

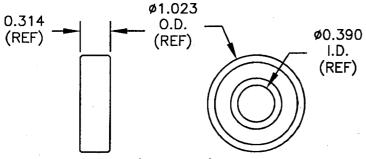






D3121-17 WASHER (SCALE 2:1)

- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



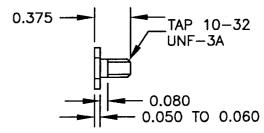
D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM 1) MATERIAL: DELRIN ROD, Ø1.25 FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES



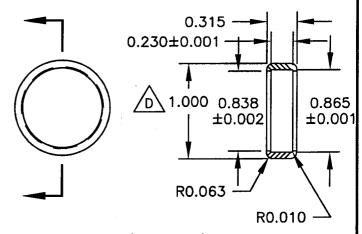
D3121-23 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-ZZ
- 2) ALL DIMENSIONS ARE IN INCHES



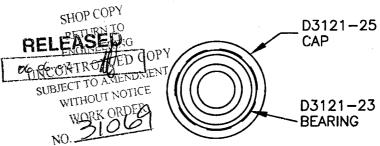
D3121-21 BOLT (SCALE 1:1)

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



D3121-25 CAP (SCALE 1:1)

- - (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES



D3121-241 BEARING ASSEBLY (SCALE 1:1)